



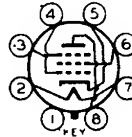
6AB7/1853

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**TELEVISION AMPLIFIER PENTODE**

SINGLE-ENDED METAL TYPE

| | | |
|--------------------------------------|-----------------------------|-------------------------|
| Heater★ | Coated Unipotential Cathode | |
| Voltage | 6.3 | a-c or d-c volts |
| Current | 0.45 | amp. |
| Direct Interelectrode Capacitances:° | | |
| Grid to Plate | 0.015 max. | µuf |
| Input | 8 | µuf |
| Output | 5 | µuf |
| Maximum Overall Length | | 2-5/8" |
| Maximum Seated Height | | 2-1/16" |
| Maximum Diameter | | 1-5/16" |
| Bulb | | Metal Shell, MT-8 |
| Base | | Small Wafer Octal 8-Pin |
| Pin 1 - Shell | | Pin 5 - Cathode |
| Pin 2 - Heater | | Pin 6 - Screen |
| Pin 3 - Suppressor | | Pin 7 - Heater |
| Pin 4 - Grid | | Pin 8 - Plate |
| Mounting Position | BOTTOM VIEW (8N) | Any |

**AMPLIFIER**

| | | |
|-----------------------|-----------|-------|
| Plate Voltage | 300 max. | volts |
| Screen Voltage | 200 max. | volts |
| Screen-Supply Voltage | 300 max. | volts |
| Plate Dissipation ° | 3.75 max. | watts |
| Screen Dissipation | 0.65 max. | watt |

Typical Operation and Characteristics - Class A₁ Amplifier:

| | Condition I* | Condition II** | |
|------------------------|--------------|----------------|---------------|
| Heater★ | 6.3 | 6.3 | volts |
| Plate | 300 | 300 | volts |
| Suppressor □ | 0 | 0 | volts |
| Screen-Supply # | 200 | 300 | volts |
| Series Screen Resistor | - | 30000 | ohms |
| Grid ## • | -3 | -3 | min.volts |
| Plate Res. | 0.7 | 0.7 | approx.megohm |
| Transcond. | 5000 | 5000 | µmhos |
| Grid Bias for | | | |
| transcond. = 50 µmhos | -15 | -22.5 | volts |
| Plate Cur. | 12.5 | 12.5 | ma. |
| Screen Cur. | 3.2 | 3.2 | ma. |

° With shell connected to cathode.

* Condition I is with fixed screen supply.

** Condition II is with series screen resistor.

Screen-supply voltages in excess of 200 volts require the use of a series-dropping resistor to limit the voltage at the screen to 200 volts when the plate current is at its normal value of 12.5 milliamperes.

• May be obtained with cathode-bias resistor having a minimum value of 190 ohms.

The d-c resistance in the grid circuit should not exceed 0.25 megohm with fixed bias, or 0.5 megohm with full cathode bias and a series screen resistor.

⊙ Precautions should be taken to insure that dissipation rating is not exceeded with expected line-voltage fluctuations, especially in the case of fixed-bias operation.

□ The suppressor should be connected in r-f and i-f stages directly to ground to minimize feedback.

★ The potential difference between heater and cathode should be kept as low as possible.

Note: It is characteristic of a high gm tube to show appreciable changes of input capacitance and input conductance with plate current. In high-frequency circuits, it is necessary to take precautions to minimize this effect.

← Indicates a change.

Dec. 1, 1941

RCA RADIONRON DIVISION
RCA MANUFACTURING COMPANY, INC.

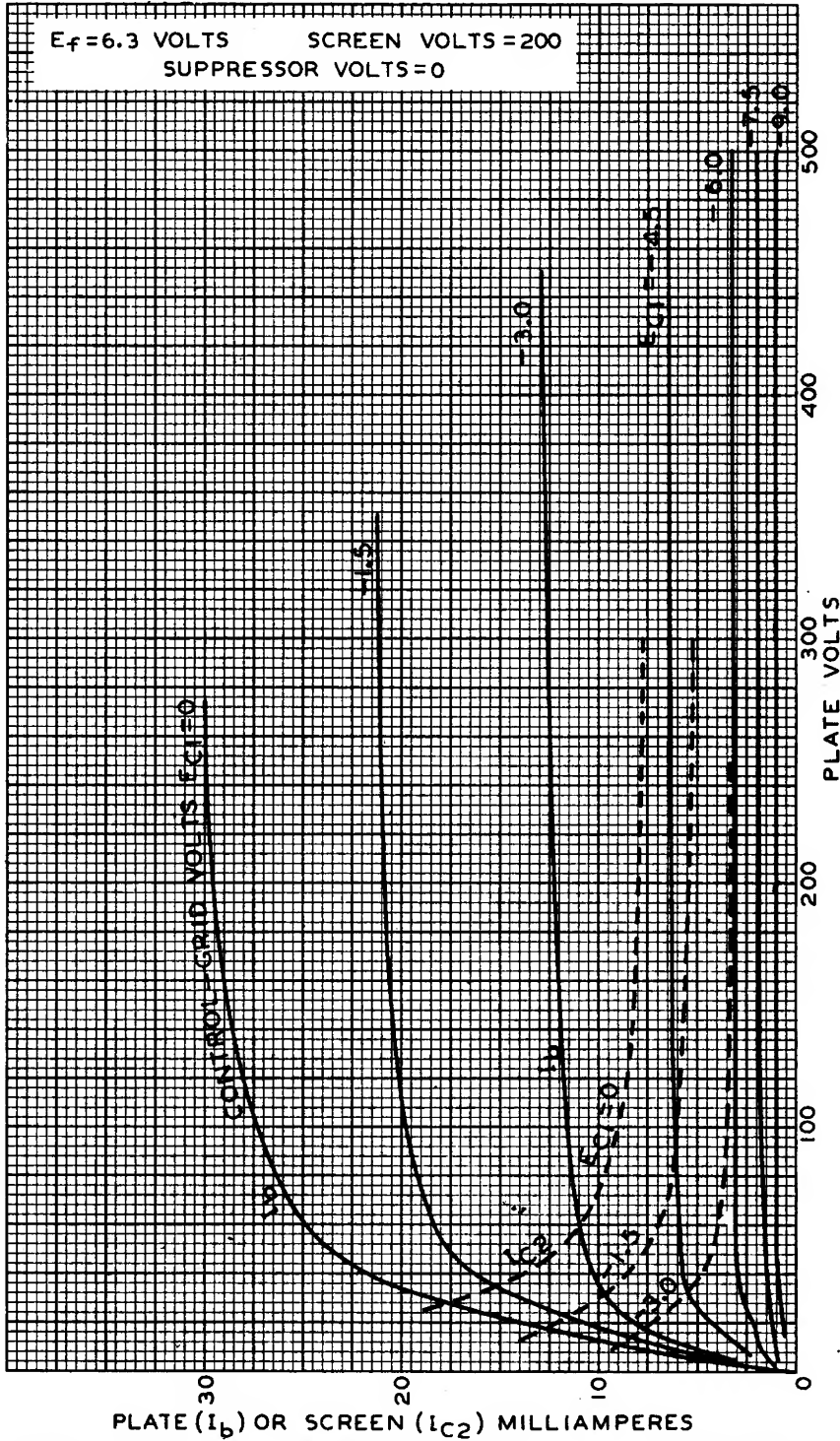
DATA

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AVERAGE PLATE CHARACTERISTICS



JUNE 21, 1938

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